

250
83

LEPROSY IN THE BIBLE

Stanley G. Browne



CHRISTIAN MEDICAL FELLOWSHIP

R
135.5
.B76
1970

LEPROSY IN THE BIBLE

by

STANLEY G. BROWNE

O.B.E., M.D., F.R.C.P., F.R.C.S., D.T.M.

CHRISTIAN MEDICAL FELLOWSHIP

56 KINGSWAY, LONDON, W.C.2

**Dr. Stanley G. Browne is Director, Leprosy Study Centre, London;
Consultant Adviser in Leprosy to the Department of Health;
Medical Consultant to the Leprosy Mission; and Secretary-
Treasurer, International Leprosy Association.**

© Stanley G. Browne

SBN 85111 930 1

**LIBRARY
CLAREMONT SCHOOL OF THEOLOGY
1325 N. COLLEGE AVE.
CLAREMONT, CA 91711-3199**

LEPROSY IN THE BIBLE

FOR years Christians have been to the fore in caring for leprosy sufferers. They have generally based their attitude to the disease and its victims on the example of our Lord, Who actually touched (Mark 1. 44) those suffering from 'leprosy', and have considered that His instructions to the twelve disciples ('cleanse the lepers'—Matthew 10. 8) are binding upon Christians down the ages. They have seen in the Scriptures of both Old and New Testaments not only the justification for thinking of leprosy as a disease apart, but also a sufficient motive for showing especial compassionate concern for its victims. On the other hand, some few have thought it improper to attempt to cure those afflicted with leprosy, regarding it in some ill-defined way as a divinely-appointed disease and hence not amenable to treatment by medical means. Many Christian writers and preachers, from Origen onwards, have considered leprosy as 'a type of sin', and 'the leprosy of sin' has figured in many sermons. Until recently, the fact that certain kinds of established leprosy were relentlessly progressive, and that no treatment seemed effective in healing the ulcers of hands and feet, certainly gave credibility to the widespread belief, enshrined in sayings and proverbs the world over, that leprosy was quite incurable (Bennett, 1896).

Recent research into leprosy—its aetiology, pathology, transmission and treatment—has brought the disease out of the mists of popular superstition and into the realm of transmissible contagious diseases that should be and are being investigated and appraised scientifically (Bloomfield, 1958). The rôle of the long-suspected cause, *Mycobacterium leprae*, is being deciphered, and Koch's postulates are being fulfilled, one by one. While many unsolved mysteries of immunology and transmission remain to challenge workers on the field and in the laboratory, leprosy is now assuming its proper place in the gamut of mycobacterial infections.

Leprosy in the Bible

Where, then, in these days, is the leprosy of the Bible? Is biblical leprosy the same as the disease we know today as leprosy? Further, why should a disease entity be singled out for special mention in Holy Writ? Has the disease called leprosy today any ritualistic or theological significance? The short answer is that true 'leprosy' (by which we mean the clinical complex of signs and symptoms called by that

name today and caused by *Myco. leprae*) is not explicitly or indubitably referred to in the Bible, although the word 'leprosy' and its cognates occur in translations from the original Scriptures into Western languages. If the Hebrew and Greek Scriptures were being translated *de novo* to-day into English or a Romance language, by scholars equally versed in historical linguistics and medical semantics and having no subconscious presuppositions, a word other than 'leprosy' would be diligently sought as the equivalent in denotation and connotation of Hebrew *tsara'ath* and Greek *lepra*.

While some may fear that such a retranslation might invalidate the impelling constraint felt by Christians to help 'cleanse the leper', others would welcome an honest rediscovery of the real meaning of the Word of God and would face realistically the implications of such a reorientation of thinking and action. Truth is both stranger than fiction, and stronger. The somewhat sentimental and even morbid over-emphasis on leprosy and the unchristian dramatization of missionary work among leprosy patients would give place to a deeper realization of the physical and spiritual needs of all God's children who suffer. In the world of today and tomorrow, the neglected and ostracized victims of leprosy (Browne, 1963), suffering social and even legal disabilities because of their disease (notwithstanding the Declaration of Human Rights), and often regarded with revulsion and fear, will still in a special way stir the consciences of Christians generally and appeal to the compassionate devotion of the dedicated medical worker.

In the providence of God, serious mistranslations of words in the original Scriptures can be overruled, and even the misidentification of biblical 'leprosy' has not been an unrelieved misfortune; in point of fact, it has inspired a tremendous volume of disinterested philanthropy, to the lasting physical and spiritual benefit of the victims of true leprosy (Lie, 1938). Christian missionaries, in championing neglected leprosy sufferers and pioneering in the realms of compassionate care, drug treatment and reconstructive surgery, have more than atoned for the unscriptural attitudes of some of their forebears and the grave hurt done in the name of religion to innocent victims of a slightly contagious disease. When nobody else cared or bothered, Christians did, and their example still inspires those of other faiths and of no faith, medical workers and research scientists alike. It is still true that a large proportion of medical and auxiliary workers in leprosy are persons motivated by the highest Christian ideals.

Of recent years, non-Christians have entered the struggle against leprosy. That is all to the good, but it does mean that interest in the humanitarian and medical aspects of leprosy is no longer the prerogative of those whose ideals and motives derive from the Bible. Formerly the pioneers and catalysts, Christians engaged in leprosy service are now the collaborators, bringing not only essential attitudes and empha-

ses to human and medical problems, but also qualities of compassionate concern and integrity, sympathy and patience.

The main reason for the bald statement that leprosy is not referred to in the original Scriptures is that it was not until about 1847 (Danielssen and Boeck) that leprosy was definitely and clearly separated as a clinical entity from the many other conditions that up to then had been not infrequently confused with it. The figurative use of the word was not, of course, outlawed by such a clinical delimitation, but its medical connotation was more precisely expressed. Somewhat later, Hansen (1874) published the initial results of his researches, and identified *Mycobacterium leprae* as an organism consistently present (although in highly variable concentrations) in all kinds of lesions that were by definition leprosy. The original Hebrew and Greek words, and their Latin equivalents, naturally lack the scientific precision and delimitation of the word 'leprosy' and its cognates as now used in English. They were generic, non-scientific, inclusive, imprecise, 'lay' terms, and should be regarded as such and wherever possible translated as such. It is not to be expected that words that were crystal clear and appropriately exact in a bygone age and in another culture, would be coterminous with terms used by Western scientific man in the twentieth century.

The word 'leprosy' in the Old Testament

Our main purpose now is to examine the word 'leprosy' as used in the Old and New Testaments, and to attempt to discover the real meaning and delimitations of the basic concept denoted by the word in its various contexts. Only thus will it be possible to arrive at an understanding of the leprosy of the Bible.

The word 'leprosy', together with its cognates 'leper(s)' and 'leprous' in the Authorized and subsequent English versions, is a translation of Hebrew *tsara'ath* in all texts where it occurs. Its primary root meaning is 'scaliness', but it also contains the sense of 'stricken' and especially 'stricken of God'. In origin, therefore, *tsara'ath* has this twofold strand, the physical and the theological or (by implication) the ritualistic.

Considerable and various difficulties are inherent in this composite meaning; difficulties also arise in determining the exact equivalents of many of the Hebrew words used in Leviticus 13 and 14 to describe the clinical appearances of people afflicted with *tsara'ath* or with conditions that had to be differentiated from *tsara'ath*. These words are translated by: rising (v.2), scab (v.2), bright spot (v.2), somewhat dark (v.6), quick raw flesh (v.10), boil (v.18), dry scall (v.30), freckled spot (v.39). The diagnostic assistance that these terms may, at first sight and to the layman, appear to afford, is illusory: no physician, relying solely on them, could today make an accurate diagnosis of the various dermatoses referred to.

Furthermore, the clinical features put forward as of differentiating value in enabling the priest to make a positive diagnosis of *tsara'ath* are not applicable to true leprosy, for example, whiteness of the hair: leucotricia does not occur in leprosy; hairs may break or fall out, and hair follicles may be replaced by scar tissue, but—in contradistinction to the usual state of affairs within a leucodermic area—the pigmentation of the hairs is unaffected. Another supposedly differentiating feature is some kind of swelling deep in the skin, or spreading deeply (Leviticus 13. 3,8,11,15,20,22,28). This sign is of no real help in the diagnosis of conditions of which we have cognizance, and especially in the recognition of early disease from which *tsara'ath* had to be differentiated. One may hazard a guess at some of the possibilities: conditions that were not *tsara'ath* may e.g., have been erysipelas adjacent to a boil (Leviticus 13. 18), infection following a burn (v. 24), a ringworm or sycosis of the scalp or beard (v.29), a pustular dermatitis (v.36), a favus or desert sore (v.42) (Browne, 1962).

Tsara'ath was not only a condition of human skin; it could also appear as a mildew on wool or linen, or on any object made from skin or leather, or as a pigmented fungus on the walls of dwellings (Leviticus 13. 47-59). It could thus be a dry-rot, or sheets of felt-like texture with a greenish-yellow or red surface (Hastings, 1963). While the lay or priestly mind of Moses' day might have been able to embrace these scientifically diverse concepts in a ritualistic generalization of 'uncleanness' or 'defilement', to our way of thinking their juxtaposition only reinforces the contention that a specific human disease, i.e. leprosy, could not have been the object of these laws. There is, of course, nothing taxonomically in common between *Mycobacterium leprae* and the various parasitic fungi that cause mildew on cloth and leather objects in damp situations. The underlying and visible basis for the 'uncleanness' in Leviticus seems to be depigmented patches on the human skin or coloured patches on the surface of an inanimate object.

When *tsara'ath* was suspected in human beings, the priest was enjoined if in doubt to temporize and re-examine after a period of seven days' exclusion from the camp—a procedure that could be repeated if necessary. In the case of inanimate objects, the same instructions were to be observed—re-examination, followed (if the suspicions were confirmed) by removal and destruction. It is to be noted that the lesions of true leprosy are of such indolent development that seven days is far too short a period in which to note any change in appearance.

From our present standpoint, the other Old Testament references are equally imprecise, and afford no certain clue to clinical diagnosis.

God could by direct and miraculous intervention cause *tsara'ath* to appear. Thus, in the case of Moses (Exodus 4. 6), it was a sign both to him and to the people; for Miriam (Numbers 12. 10-12), it was a salu-

tary warning or punishment. The appearance and disappearance of 'leprosy' at the direct behest of God in these two instances, probably explains much of the subconscious attitude towards 'leprosy' of both Jews and Christians.

We note, in passing, that Moses prayed that Miriam might be *healed* (not cleansed). We also note incidentally that the word 'white' should not appear in Numbers 12. 10 or in 2 Kings 5. 27: flakiness or fururaceous desquamation might be intended rather than whiteness, as in Psalm 147. 16—'snow like wool', and Psalm 68. 14: 'when the Almighty scattered kings in it it was (*white*) as snow in Salmon'; in this case, it was the scattering (and not the whiteness) that is referred to. Contrast Isaiah 1. 18—'sins as scarlet . . . white as snow', and Psalm 51. 7 'whiter than snow'. Leprosy lesions are never achromic; but whiteness of the skin and the affected hair is stressed in Leviticus 13. Some have seen in *tsara'ath* a kind of vitiligo (the 'white leprosy' of mediaeval Europe and modern India), but this banal if unsightly condition would scarcely give rise to a degree of fear warranting the exclusion from the camp of every leper (Numbers 5. 2 and Deuteronomy 24. 8), or suggest a resemblance to a macerated foetus (Numbers 12. 12): 'one dead, whose flesh is half consumed' is not suffering from a benign or transient skin rash. It may be remarked, in passing, that today the identification of the single sign of an achromic area of skin with leprosy evokes the whole range of fear and revulsion associated with real leprosy.

The nature of Naaman's *tsara'ath* (2 Kings 5), which in a non-Jewish state did not render him unfit for public office, cannot be deduced from the record. (As a non-Jew and already outside the Law, he could not be pronounced ritually 'unclean' by reason of *tsara'ath*). His skin rash may possibly have been scabies, for which the sulphur-containing waters of Rabbi Mayer (near Tiberias) are reputedly curative to this day, sufferers being exhorted locally to 'dip seven times' (Leprosy Rev., 1938). The transmissible disease that subsequently afflicted Gehazi (and his descendants) could also have been scabies, caught by contact with the garments he coveted (2 Kings 5. 27). It seems that Gehazi continued his service after being smitten with *tsara'ath*. We simply have insufficient clinical details to enable us to hazard a diagnosis of Naaman's *tsara'ath*, and the reference in Luke 4. 27 is similarly imprecise, Greek *lepra* being substituted for Hebrew *tsara'ath*.

The 'four leprous men' (2 Kings 7. 3-11) lived outside the city because they were unclean by reason of *tsara'ath*. They were evidently mobile, and no mention is made of any neuropathic ulceration of their feet.

Azariah (2 Kings 15. 5) (or Uzziah, 2 Chronicles 26. 19-21) had a *tsara'ath* lesion on the forehead, which became red and swollen when he was angry. Some leprosy lesions may indeed become hyperaemic during a bout of anger, and the forehead is in some countries a site of predilection for an indolent lesion that might have persisted 'till the

day of his death'. Some have presumed a hyperaemic halo surrounding an area of incipient leucoderma—a somewhat speculative and imaginative assumption.

The possibility of cure of *tsara'ath* was held out in Leviticus—not only of clinical arrest, but of complete restoration. Cure is usually associated with ritual cleansing rather than with physical healing (Leviticus 14), and may have followed the disappearance of the signs that had led to the priestly diagnosis of *tsara'ath* in the first place. The ritual was recognized and respected by our Lord (Matthew 8. 4, Mark 1. 44, Luke 5. 14, 17. 14). In the Talmud (Thin, 1891), detailed instructions are laid down on the matter of the ceremonial or ritualistic uncleanness of *tsara'ath* that are on a par with those concerned with handling a corpse, or with menstrual uncleanness (Numbers 5. 2). Chief Rabbi Adler states: 'The uncleanness of the leper seems, according to the Talmud, to have been ordained for the purpose of securing Levitical purity, and not with the view of preventing contagion.'

(In mediaeval art, the patriarch Job is always represented as having leprosy, though the word *tsara'ath* does not occur in the book of Job.)

Medically speaking, none of these references to *tsara'ath* includes any of the indubitable signs and symptoms of leprosy, and those that are mentioned tell against rather than for leprosy. Furthermore, none of the pathognomonic features of leprosy are so much as hinted at; these are, anaesthetic areas of the skin, painless and progressive ulceration of the extremities, and facial nodules. These are obvious departures from the normal that would be noticed by observant laymen, and were in fact noted in other lands when true leprosy began to occur.

This concatenation of converging lines of internal evidence—both positive and negative—should do more than just raise a suspicion that the *tsara'ath* of the original documents of the Old Testament did not refer to leprosy. They would seem to indicate that '*tsara'ath*' is primarily and predominantly a state of ritualistic uncleanness or ceremonial defilement. Are there any confirmatory indications from profane sources that leprosy was not present in ancient Palestine or the lands of the Fertile Crescent before, say, the 4th century B.C.?

Leprosy in Old Testament times

As far as we can tell, leprosy was quite unknown in the lands of the Bible at the times of Moses and the patriarchs. The oft-quoted references in the Eber's papyrus (c. 1550 B.C.) to 'uchedu' (ukhedu) and to 'Chons' swelling' are now held by most authorities to be too vague to be indicative of leprosy. On the other hand, there is evidence that in both Akkadian and Sumerian the words used for serious skin disease could also be applied to guilt (Oppenheim, 1964). The human

features portrayed on a Canaanite clay jar found in the temple of Amenophis III (c. 1411-1314 B.C.) have been thought by some—on insufficient grounds, in the writer's opinion—to be somewhat reminiscent of the leonine facies of lepromatous leprosy, and hence to provide evidence that the disease existed in Egypt at that time (Yeoli, 1955). It would seem most inappropriate for such a representation to figure on a drinking vessel.

There is a suggestion that Nubian slaves, taken to Egypt about 480 B.C. by Persian hosts, may possibly have brought leprosy with them, but no precise clinical description is extant.

The earliest indubitable references to leprosy come from India (Lowe, 1942), and are dated as late as c. 600 B.C., although they almost certainly embody earlier oral tradition. Both skin and nerve signs are recognized, and this serious disease is even then differentiated from the benign leucoderma. Records from China and Japan are dated somewhat later than those from India. According to Veith (1947), the history of 'leprosy' in Japan has interesting parallels with that of biblical 'leprosy': the imprecision, the non-clinical overtones, the inordinate fear, etc.

It is noteworthy that the earliest records of leprosy from India and China are surprisingly accurate and full, proving close observation and intelligent recording. While this may not necessarily indicate that leprosy appeared suddenly in these lands, it does suggest that had leprosy existed at the time of Moses the law-giver, its cardinal signs could not have escaped the notice of observant priests and laymen in Egypt and Palestine.

In the Western world, Hippocrates (c. 400 B.C.) seems not to be acquainted with leprosy; he does indeed refer to *lepra* in a context that suggests psoriasis, or (in another scene) an irritating blotchy summer prurigo or scurf (Browne, 1963). The true nature of the more serious malady he calls 'the Phoenician disease' is unknown, though some have thought that it might be leprosy.

The suggestion has been advanced by Andersen (1969) and others that the sudden appearance of the well-recognized signs and symptoms of true leprosy in the West coincided with the return of the armies of Alexander the Great from the Indian campaign in the years 327-326 B.C. By that time leprosy had been prevalent in India for at least two or three centuries, but was quite unknown in countries of the Mediterranean littoral before.

Pliny asserts, with some circumstantial justification, that leprosy was brought into Europe by Pompey's returning army in 62-61 B.C., the disease being already known and recognized.

The earliest records of leprosy in Europe are known only from later quotations from original works that have been lost. Straton, a disciple of the Alexandrian physician Erasistratos (c. 300-250 B.C.) is

quoted by Rufus of Ephesus (A.D. 98-117) as giving an accurate description of low-resistant leprosy. This is the first indubitable record of leprosy in Europe: it is called '*elephantiasis*', and is regarded as a completely new disease, unknown to previous observers; it is implied that, had it come to their notice, they would have seen it and described it. Some years later, *elephantiasis* was picturesquely designated '*leon-tiasis*' by reason of the thickened corrugations of the facial skin, and '*satyriasis*', when the cheeks and eyebrow region became swollen and prominent. While original texts from the third century B.C. referring to leprosy have been lost, enough is known to suggest that, once introduced, the disease followed the soldiers and traders from Athens and Rome into the countries of Europe and North Africa.

Such, then, is the evidence. Leprosy was unknown in patriarchal times. It seems to have burst in on the Western world with apparent suddenness about three centuries before Christ. From sacred and profane literary sources, we may now turn to skeletal remains.

It has been recently recognized, thanks to the researches of Møller-Christensen (1961; British med. J., 1962), that advanced lepromatous leprosy specifically and uniquely erodes the anterior nasal spine and the alveolar process of the maxilla, thus providing persistent and indestructible proof of its presence during the life-time of the propositus. (Progressive reduction of the bony phalanges is secondary to peripheral nerve damage, and hence is non-specific.) Systematic examination of some thousands of human skulls, variously dated, has enabled Møller-Christensen to identify the specific changes due to leprosy. No evidence from Old Testament countries and times has yet come to light. No mummy with leprosy has been found earlier than two Coptic mummies in the Nubian collection dated about the 5th century of our era (Elliot Smith and Dawson, 1924; Rowling, 1961; Thorwald, 1962).

While this argument from silence does carry some weight, it might be objected that persons suffering from leprosy might well have passed their days and ended their lives far from communal burying-grounds. In certain countries (e.g., Eastern Nigeria, Bali and elsewhere) persons dying of leprosy were left unburied. The mentally afflicted might dwell 'among the tombs' (as in Mark 5. 3 and Luke 8. 27), and also those who were 'unclean' because of *tsara'ath*.

Be that as it may, it is passing strange that Møller-Christensen (1969) 'failed to find the slightest trace of lepromatous bone changes among 1844 skeletons, mummies and skulls from Egypt dating from between 6000 B.C. and A.D. 600, and among 695 skeletons from Lachish, in Southern Palestine (700-600 B.C.).' We must await the results of further osteo-archaeological researches before a final pronouncement is possible, contenting ourselves at present with the assertion that, if leprosy indeed existed at all in ancient Egypt or in Palestine at the time of the prophets, it could not have been at all common.

To sum up, there are no positive proofs that leprosy is referred to in the Old Testament or even existed at the time of the Exodus, nor is there any evidence from profane literary sources or skeletal remains.

If, then, *tsara'ath* is not leprosy as we know it today, and as a generic term possibly may not even have included leprosy, what could have been the diverse dermatoses comprised by the term *tsara'ath*? As we have seen, the word has no modern Western equivalent, for our conceptual climate of verbal precision precludes the bringing together in thought of a mildew growing on the surface of inanimate objects, ritual defilement and a scaly condition of the human skin. It may indeed be idle to seek an exact equivalent, and misleading to suggest that, e.g. psoriasis or vitiligo should replace 'leprosy' as a translation of *tsara'ath* in a clinical context. Even should we agree on an alternative to the word 'leprosy', as applied to human beings, the *tsara'ath* of dwellings and cloth and leather still remain to bedevil the lexicographer and etymologist.

To the deeper question 'Why were these conditions regarded in this light, and hence subject to ritualistic or ceremonial discrimination?', it is impossible to provide a simple, convincing answer. It cannot be that *tsara'ath* in its various manifestations was uniformly serious, nor could human *tsara'ath* be considered as highly contagious or as threatening an epidemic of grave dimensions. Whatever human *tsara'ath* may have been, biologically considered, it was in effect a social ill characterized by visible skin blemishes, engendering fear, and requiring ritualistic cleansing. Among unsophisticated peoples, any skin eruption—especially when present on the exposed face—may evoke an ordinate fear: it is a visible and obvious departure from the normal, it is unsightly or even hideous and revolting, it may lead to scarring and disfigurement, and it is perhaps catching. Sometimes, it may be associated with taboo violation, and hence with the fear of punishment or retribution unless certain purification rituals are performed (Edwards, 1963). Again, a rational fear of a serious contagious disease (like smallpox) may have religious overtones: in some African tribes, the 'god of smallpox' is feared because he strikes suddenly and capriciously, and must be placated. But leprosy is not explosively epidemic, or obviously contagious to a high degree.

It is not difficult to understand that when leprosy appears in a community, the disease brings as it were to a focus existing fears and phobias (Skinsnes, 1964), since it embodies many mysterious features—an oft-times unrecognized source of infection, haphazard attack, long silent period, protean clinical signs, inexorable march of peripheral ulceration once it appears, and a lingering life that is worse than death. The fear is confirmed and enhanced when, at the same time as the skin breaks down, secondary cases begin to appear (the infection, of course, having been contracted several years previously). Some tribes refer

to a pathognomonic 'leprosy smell', which really means the stench of sphacelous and gangrenous ulcers. Others fear these ulcers, erroneously considering them to be highly contagious and incurable; no ordinary treatment appears to stay their course. There must be proverbs in hundreds of languages to the effect that leprosy cannot be cured—it is unique. In many countries, deformity is regarded as inevitable and untreatable.

The taboo violation is sometimes particularized: in China, for instance, leprosy is thought to be the punishment for sexual misdeemeanour, and is to be got rid of only by deflowering a virgin or by 'selling' it to as many people as possible (Skinsnes, 1964). It is the ultimate in moral degradation. In several cultures, there are indications that leprosy is associated with venery; the satyriasis of the Greeks had a sexual component.

The fear of contagion is so strong among some peoples that the victims in parts of China were burned alive if rich, or buried alive if poor; in some districts in Eastern Nigeria, they actually asked to be buried while still alive to prevent their passing on the infection to others.

Leprosy is widely held by some to be transmissible to offspring, or to be evidence of wrong-doing in a previous incarnation. In some cultures, sufferers from leprosy are forbidden to marry, for fear of transmitting the disease to the next generation. On the other hand, according to the Talmud (Thin, 1891), a non-Jew with *tsara'ath* was not considered unclean, and could live with a Jewish family. Furthermore, so far from being considered very contagious, suspected *tsara'ath* in a bridegroom was not allowed to interfere with the seven days of honeymoon: after a week's cohabitation, the bridegroom was examined by the priest. The victim of *tsara'ath* was regarded as 'unclean', i.e., defiled, or ceremonially contaminated (Leviticus 13. 44-46, but note that 'utterly' of verse 44 is an insertion). By extension and interpretation, a man with *tsara'ath* was not to be touched, or even saluted; he had to keep at least two yards from a healthy person, or seventy-five yards if the wind was blowing from his direction.

Modern usage by the non-medical laity in Israel is in keeping with the unconscionable fear and loathing evoked by the word *tsara'ath* in ancient times. It is not only the contagiousness, but the mystery and the awfulness of *tsara'ath* that strike terror to the heart. *Tsara'ath* is leprosy, and leprosy is to be feared and dreaded as no other disease. However repellent we may find the idea of an arbitrary deity capriciously meting out the stigmata of his disfavour to innocent persons, *tsara'ath* does indeed in some way seem to indicate that the victim is 'stricken of God'.

Leprosy in the New Testament

The words translated 'leper(s)' and 'leprosy' occur about fifteen times in the synoptic Gospels, and not elsewhere in the New Testament. Like *tsara'ath*, *lepra* (*lepros*) has an ill-defined non-specific connotation; in Attic and biblical Greek it means scaly, or scabbed, and it is one of a large family of words derived from a root meaning 'to husk, to scale or to remove the bark'. Some of the derivatives contain the idea of rough or scaly, whereas others carry the meaning of thin, scale-like (Lendrum, 1952).

The references to leprosy in the Gospels may be arranged under six heads:

1. Matthew 8. 2-4, Mark 1. 40-45, and Luke 5. 12-15. The man with leprosy, *lepros*, or 'full of leprosy' (Luke 5. 12), came to our Lord in worship and entreaty. He was immediately and miraculously 'cleansed', and was instructed to fulfil his ceremonial obligations 'according as Moses commanded'.

2. Matthew 10. 8. Our Lord enjoined the twelve to 'cleanses the leprosy' (according to Matthew), but this instruction is omitted in Mark 16. 7-13: note that the 'sick' were 'healed' (verse 13). In the parallel passage in Luke (10. 1-9), there is no reference to those with leprosy, unless the command 'heal the sick' (of verse 9) included leprosy, which is unlikely.

3. Matthew 11. 5 and Luke 7. 22. The two emissaries of John the Baptist both see and hear our Lord's attestations of His Messianic mission: *inter alia*, *leproi* are cleansed. This account implies a repeated or habitual practice of 'cleansing the lepers' on the part of our Lord.

4. Luke 17. 11-19. Note that all ten '*leproi*' were 'cleansed' (verse 14), as they went: one returned 'healed' (v.15). The wording suggests that the terms 'cleanses' and 'heal' might have been used loosely and synonymously. It is not actually stated that the Samaritan went to the priest after all: note that it was a non-Jew who saw that he was 'healed' (v.15). This differential use of 'cleanses' and 'heal' for Jews and non-Jews respectively has been thought to be significant (Cochrane, 1961).

5. Matthew 26. 6, and Mark 14. 3. Simon '*lepron*' was apparently allowed back in his town house after 'cleansing', though this is not expressly stated.

6. Luke 4. 27. Many sufferers from leprosy ('*leproi*'), in Israel at the time of Elisha remained 'uncleansed', except for Naaman (2 Kings 5. 1-27).

In none of these instances are any clinical details given to indicate what is meant by the diagnosis of '*lepros*'. Apart from the one example of 'healing' (Luke 17. 15) and two of the use of the neutral phrase 'the leprosy departed from him' (Mark 1.42, Luke 5.13), the verb used ('cleansed') signified ritual purification, and those concerned were

enjoined to fulfil the demands of the law. Our Lord respected the Mosaic law in regard to the ceremonial requirements that had to be fulfilled before 'cleansing' could be officially pronounced. He ignored the derivative injunction against approaching and touching and talking with those afflicted by *lepros*. He showed spontaneous concern and a deep compassion for their lot, and treated them as human beings in need.

What is the disease referred to in the New Testament as '*lepros*'? Was it, or did it include, leprosy? There are no means of ascertaining with certainty, but some help in answering these questions may be derived from philological, historical and archaeological considerations.

As we have already seen, true leprosy had been present in Europe for about three hundred years before the time of our Lord. It was never called '*lepra*', but '*elephantiasis*'.

'*Elephantiasis*' can with reasonable certainty be identified with true leprosy. It is a chronic disease characterized by widespread defined skin swellings, ulcerated destruction of the extremities and facial disfigurement. It is regarded as incurable in its later stages, and highly contagious.

On the other hand, all references to '*lepra*' seem to derive from the earlier Hippocratic concepts of scaly, desquamating skin conditions, with no indication that any such disease includes the pathognomonic signs of true leprosy.

It is only later that these two distinct concepts—of true leprosy (called '*elephantiasis*'), and of a group of scaly skin conditions (called '*lepra*')—became confused, and the confusion seems to originate with the writings of Galen.

With this explanatory background, we may turn to the version of the Old Testament, the Septuagint, done into Greek from the Hebrew by a group of Alexandrian scholars about 300-150 B.C. Seeking a verbal equivalent for the lay term *tsara'ath*, they chose '*lepra*' and used this term in all texts where *tsara'ath* appears in the original. '*Lepra*' was at hand to represent a generic concept of scaliness; it was a neutral word, and contained no essential idea of ritualistic uncleanness or defilement. '*Elephantiasis*' was also in current (medical) use, but was not chosen by the translators—we may speculate as to the reason.

All synoptic references appearing in English versions as 'leprosy' are translations of this lay term, and not of the medical designation '*elephantiasis*' which does not appear in the New Testament at all. It is therefore impossible to make a definite diagnosis of the disease or diseases that kept men apart from their fellows in first-century Palestine. Ordinary people, and ordinary healers (apart from Alexandria-trained physicians) could not be expected to possess knowledge enabling them to differentiate between '*lepra*' and '*elephantiasis*', and between all the conditions comprised under the term '*lepra*'. And in any case, in

Palestine at least, the popular Aramaic speech must have carried with it at least part of the overtones of ritualistic defilement of the Hebrew *tsara'ath*.

The nomenclature is further confused by the existence of *elephantiasis Arabum* (now known as Bancroftian filariasis), and by the later addition of *Graecorum* to the word *elephantiasis* when used to designate the original *elephantiasis* (which, of course, was true leprosy). The exact date the term *elephantiasis Graecorum* came into general medical use is not known, but Celsus (53 B.C. to A.D. 7), writing in Latin, refers to true leprosy by this term, and Aretaios of Cappadocia some seventy years later and Galen (A.D. 133-201) were acquainted with it.

To the question, 'Did the "*lepra*" of the New Testament include true leprosy?', there can be no definite answer. It probably did, since true leprosy certainly existed in Greece, Italy and north Africa at the time of our Lord, and also probably in the other countries of the Mediterranean littoral.

It is a moot point whether 'Dr.' Luke could properly have used the medical term '*elephantiasis*' instead of the lay word '*lepra*' in his gospel, which was of course intended primarily for the layman, providing him with an accurate historical record 'of all that Jesus began both to do and teach' (Acts 1. 1).

No positive help comes from archaeological findings in Palestine, for no indubitable evidence from inscriptions or pottery is forthcoming, and no skeletal remains are extant showing the specific bone damage to leprosy.

The subsequent history of the Greek word '*lepra*' is instructive (Lendrum, 1952; Tas, 1953). In his translation of the Bible into the vulgar Latin tongue (The Vulgate), Jerome (A.D. 383), took over the Greek *lepra* and used the transliterated form as the Latin equivalent of '*tsara'ath*' of the Old Testament and '*lepra*' of the New. Under the influence of this Vulgate translation, the word 'leprosy' and its cognates subsequently entered versions in the languages of Western Europe. It is of philological interest that papyrus, paper, and *liber*, libel, etc., are all derived from cognates.

Leprosy in mediaeval times

In English, as we have seen, leprosy remained a generic term until it was precisely delimited clinically by Danielsen and Boeck in 1847, and bacteriologically by Hansen in 1874. In mediaeval English, 'leprosy' could be used with the definite or the indefinite article, and was singular or plural. It could refer to diseases of man and of animals and plants, fungal infections of growing crops, mildew of damp stored grain, and the mange of domestic pets. By extension, it was applied

to beggary and indigence, and could be used in the sense of a plague—i.e., a pestilence, epidemic or visitation. Leprosy was certainly known in Britain in the Middle Ages, and was already indigenous when some of the Crusaders (1096-1200) returned, having caught leprosy in the near East. The dimensions of the endemic form have probably been much exaggerated (MacArthur, 1953) by some historians who base their estimates on the numbers of hospices built for 'lepers'. The epithet 'leper' was not applied to the squint windows of mediaeval churches until last century.

Notwithstanding the imprecision of the term 'leprosy' as used by non-medical people writing in English in the Middle Ages, the researches of Møller-Christensen and Andersen in burial-grounds reveal that in most cases, the skeletons unearthed show the specific signs of lepromatous leprosy in the skull. That is to say, in Denmark at least, advanced lepromatous leprosy could be diagnosed and its victims accorded the ministrations of devoted monks. In Britain, Brothwell's (1958) comment that 'the probability of confusing leprosy with some other disease seems fairly slight', would appear to be ill-founded, in view of the wide meaning of the word as used by the mediaeval layman, and the wide range of ills (including dirt and laziness and venery) that afflicted inmates of many of the numerous leprosy hospices up and down the country.

Monastic exegesis, ill-based and extravagant, invested both the patriarch Job and the beggar Lazarus (Luke 16. 20-21) with leprosy (Lazarus=without help). On no discoverable grounds, Lazarus of Bethany was pronounced a 'leper', and made the patron saint of those thus afflicted: hence the derivatives, the disease of St. Lazarus, lazar house, lazaret, lazaretto, lazarine leprosy, etc.

In the countries of Southern Europe, and to a much less extent in England, the infamous 'lepers' mass' was celebrated; the unfortunate person diagnosed as having leprosy was indeed reckoned 'as one dead'. Hooded and shrouded, he had to listen to a priest reading over him the solemn cadences of the burial service, ending with the awful words forbidding him henceforth 'to enter church, market-places, the mill, the bakehouse, the assembly of the people. . . . I forbid thee to go abroad without thy leper uniform.'

In some circles, victims of so-called leprosy were called 'Christ's poor' and 'Christ's dear children', and singled out for special merit-earning acts of compassion, high-born ladies being assiduous in kissing their feet. This extravagant and sentimental attitude may be traced in part to a widespread belief that our Lord Himself had leprosy. Jerome in the Vulgate translates the Hebrew '*naga*' of Isaiah 53.4 and 8 by 'leprous' ('*Et nos putavimus eum quasi leprosum*') in the sense of 'stricken of God' (MacArthur, 1953), and John Wyclif rendered this into English as 'and wee heeldun hym has leprous'.

The rôle of Christianity in the perpetuation of the stigma of leprosy is not easy to define. It may be at once admitted that relics of mediaeval superstitions and attitudes have all been at times justified by reference to the Mosaic code, and by applying the *tsara'ath* regulations to leprosy. And it cannot be denied that serious prejudice against leprosy sufferers has in historical times been reinforced by the wholesale transfer of the corpus of *tsara'ath* beliefs to the perfectly innocent victims of a slightly contagious mycobacterial disease. In some countries, a sophisticated *raison d'être* is thought to be found in the Scriptures for long-held and pre-Christian attitudes to those suffering from leprosy. The harshest measures of persecution, compulsory segregation, deprivation of social and legal rights, forcible separation of families, may be traced in many of the prejudices extant in Christendom today. Leprosy is burdened with the incubus of an unscientific past, and with unscriptural accretions in addition to medical and ritualistic accidentia that were considered by the Jews to be proper to *tsara'ath* and *lepra* but which are totally inapplicable to leprosy.

But it would be quite wrong, and historically unjustifiable, to attribute wholly to the influence of biblical and Christian teaching the widespread stigma attaching to leprosy. Apart altogether from any ritualistic significance, and notwithstanding the eclectic or vague meaning of *tsara'ath*, the victim of leprosy often does present a repulsive, even nauseating appearance, a travesty of the human form. In many non-Christian lands and non-Christian civilizations, there exist an innate dread and fear of true leprosy, compounded of the physical appearances of the advanced disease and also the accumulated body of folk-lore surrounding its origin and cause. A whole amorphous mass of beliefs and superstitions, of taboos and prohibitions, may surround the disease.

Because of the real offence inherent in the word '*leper*', with its implications of uncleanness and moral turpitude (as seen in the pejorative and journalistic uses of the word), the World Health Organization, the International Leprosy Association and other representative and influential bodies have banned the word from their publications. For the same reasons, repeated attempts have been likewise made—but without general success—to popularize an alternative to the word '*leprosy*' itself and its cognates. Thus, the term Hansen's disease (or Hansenitis) is in use in certain countries; but the coining of eponymous diseases is not much in favour these days, and in any case Hansen was not the first to describe leprosy, nor did he suffer from it himself. Derivative words and phrases (as '*hansenomatous Hansenitis*' for '*lepromatous leprosy*') would be both awkward and cumbersome. Other suggestions like '*dermatoneural mycobacteriosis*' or '*bacterial neuro-dermatitis*', have little to commend them and are too long for general adoption. And, in any case, the newly-coined expressions must themselves be explained to the layman or the patient.

The suggested changes in nomenclature would be meaningless to the majority of people afflicted by leprosy; the indigenous social concepts of a feared disease—recognized, if not precisely delimited or pathologically defined—are independent of the words used. When it is appreciated that true leprosy, together with the diseases sometimes mistaken for true leprosy, evokes a characteristic pattern of ideas and reactions in diverse contexts and in different civilizations, the whole question is seen to be more fundamental than nice verbal distinctions. What was the ‘something’ that gave rise to the fears that resulted in the Levitical legislation? Could it—despite the clinical imprecisions and the archaeological silences—have been leprosy? Or, perhaps more convincingly, could leprosy have gradually become burdened with the incubus and opprobrium that was initially spread over all blemishing conditions of the skin regarded as connoting ritualistic defilement?

In the matter of new versions of the Scriptures, three possibilities appear to be open to the translator (Gramberg, 1960). He may use the equivalent for ‘leprosy’, if one exists in the language concerned, and thus fly in the face of the medical arguments here adduced. He may transliterate ‘*tsara’ath*’ or ‘*lepra*’ or both, using them as lack-lustre loan words, with all the shortcomings and limitations that this would entail. Or he might try to find some descriptive word or phrase that would cover (a) a scaly disease of the human skin, (b) a fungal condition of walls, cloth and leather, and (c) ceremonial defilement. This latter task verges on the impossible, for words combining such disparate conceptions are of rare occurrence in any language.

Biblical leprosy and Missions

If, then, the biblical basis for equating *tsara’ath* or *lepra* with the disease we know as true leprosy and consistently associated with infection with *Mycobacterium leprae*, is so uncertain and tenuous, is there any justification for maintaining that Christ’s command to His disciples to ‘cleanses the leper’ (Matthew 10. 8) is valid for medical missionary activity among leprosy sufferers today? This is a question that must be faced, and that for several reasons. More and more, leprosy is being investigated and treated like any other disease, by Christians and non-Christians alike. Knowledge of leprosy is being disseminated, and the present generation of missionary-hearted Christians whose support for leprosy work may have been based on inadequate or erroneous exegesis, is passing away. Other missionary work, and other medical biblical missionary work, that in the past may have been somewhat overshadowed by the ostensibly more scriptural ‘leprosy’ work, will be able henceforth to make their appeal to the Christian public on the same general grounds as must in future be those of the appeal of leprosy

missionary work. This will naturally be couched in different terms, depending on theological outlook, but it will be essentially the canalization of Christian compassion and Christian service for the disinterested succour of the needy, the neglected, the untended sick.

The words, 'Cleanse the leper', will be given the same content in the future as they had in our Lord's day and as spoken by Him. In an amplified paraphrase, they might read thus: 'Seek the outcast, the underprivileged, all those who suffer because of society's attitudes. Help them in all ways. Help to put them on their feet, and bring them back into the society that despised and ostracized them.'

Those afflicted with leprosy are in a special category of need by reason not only of their physical and mental suffering, but also of the neglect of their fellows and the positive discrimination of society against them. Christians will thus continue to 'touch' those afflicted by leprosy, bringing them sympathy and healing, and drawing them nearer health and nearer God.

TRANSLATION IN RECENT VERSIONS

The *Revised Standard Version* (1952) follows closely the text of the Authorised Version in the translation of *tsara'ath* in the Old Testament and *lepra* in the New.

The *New English Bible* (1970) follows the Authorised Version in the corresponding New Testament passages, adding an explanatory footnote to Matthew 8. 2: 'The words leper, leprosy, as used in this translation, refer to some disfiguring skin disease which entailed ceremonial defilement. It is different from what is now called leprosy.' In the Old Testament, however, *tsara'ath* is translated inconsistently. On the human skin, *tsara'ath* becomes: leprosy, leper, diseased, the disease, the condition, foul disease, skin-disease, malignant skin-disease; whereas on cloth or on walls, a welcome distinction is provided by the related terms: mould, stain of mould, rotting mould, fungus infection. The intrusive 'white' again appears in Exodus 4. 6, Numbers 12. 10, and 2 Kings 5. 27. (Psalm 68. 14 gives an authentic picture of 'snowflakes falling').

REFERENCES

- ANDERSEN, Johs. G. (1969). Studies in the mediaeval diagnosis of leprosy in Denmark. *Danish med. Bull.*, 16, Suppl. IX, 1.
- BENNETT, Sir R. (1896). *The Diseases of the Bible*. Religious Tract Society, London, 3rd ed.
- BLOOMFIELD, A. L. (1958). A bibliography of internal medicine. Chicago. p. 234.
- BRITISH MED. J. (1962), 1, 852. Diseases of ancient man.
- BROTHWELL, D. R. (1958). *Med. Hist.* 11, 287. Evidence of leprosy in British archaeological material.
- BROWNE, Derek (1963). *St. Bartholomew's Hosp. J.*, 135. The stigma of leprosy—a reproach and a challenge. (See *J. Amer. med. Ass.* (1963), 186, 67.)
- BROWNE, S. G. (1962). *Expository Times*, 73, 242. Reprinted in *Int. J. Leprosy* (1963) 31, 229.
- COCHRANE, R. G. (1961). Biblical leprosy—a suggested interpretation. The Tyndale Press, London.
- DANIELSEN, D. C. and BOECK, W. (1848). *Traité de la spedalzke ou éléphantiasis des Grecs*. Paris. (Translated from Norwegian original; Christiania, 1847.)
- EDWARDS, R. (1963). *Middlesex Hosp. J.*, 63, 61 and 72. The challenge of leprosy.
- ELLIOT SMITH, G. and DAWSON, W. R. *Egyptian Mummies*, London, 1924.
- GRAMBERG, K. P. C. A. (1959). *Trop. Geogr. Medicine*, 11, 127. Leprosy and the Bible. Reprinted in *The Bible Translator* (1960), 11.
- HANSEN, G. A. (1874). *Undersøgelser angaaende spedalskhedens arsager, tildels udførte sammen med forstander Hartwig*. English translation in *Brit. for. med.-chir. Rev.* (1875), 55, 459; and *Int. J. Leprosy* (1955), 23, 307.
- HASTING'S Dictionary of the Bible (1963). 2nd Ed. Art. 'Leprosy'. Edinburgh: T. & T. Clark.
- LENDRUM, F. C. (1952). *Amer. J. trop. Med. Hyg.*, 1, 999. The name 'leprosy'.
- LEPROSY REVIEW (1938). Editorial 9, 48.
- LIE, H. P. (1938). *Leprosy Rev.*, 9, 25 and 55. On leprosy in the Bible. Reprinted from *Acta Dermato-Venerologia* (1937) 18, 524.
- LOWE, J. (1942). *Indian med. Gaz.*, 77, 180. Reprinted in *Leprosy Rev.* (1947), 18, 54. Comments on the history of leprosy.
- MACARTHUR, W. (1953). *Leprosy Rev.*, 24, 8. Mediaeval 'leprosy' in the British Isles.
- MØLLER-CHRISTENSEN, V. 1961. The history of syphilis and leprosy—an osteo-Munksgard; Bristol: John Wright.
- MØLLER-CHRISTENSEN, V. (1969). The history of syphilis and leprosy—an osteo-archaeological approach. *Abbotemps*. Book I, 20.
- OPPENHEIM, L. R. (1964). Quoted in *Skinsnes*, O. F. *Leprosy Rev.*, 35, 115.
- ROWLING, J. L. (1961). *Proc. R. Soc. Med.*, 54, 409. Pathological changes in mummies.
- SKINSNES, O. F. (1964). *Leprosy Rev.* 35, Leprosy in Society: p. 21, Leprosy has appeared on the face; p. 105, The pattern of concept and reaction to leprosy in oriental antiquity; p. 175, The relationship of the social to the medical pathology of leprosy.
- TAS, J. (1953). *Actes du 7e Congrès Intern. d'Histoire des Sciences*, à Jerusalem, p. 583. On the Leprosy of the Bible.
- THIN, G. (1891). *Leprosy*. London: Percival & Co.
- THORWALD, J. (1962). *Science and secrets of early medicine*. London: Thames and Hudson.
- VEITH, I. (1947). *Bull. Hist. Med.*, 21, 905. A Japanese picture of leprosy.
- YEOLI, M. (1955). *J. Hist. Med.*, 10, 331, Reprinted in *Int. J. Leprosy* (1962), 30, 211. A 'facies Leontia' of leprosy on an ancient Canaanite jar.



C.M.F. PUBLICATIONS

- | | |
|--|---------------------|
| Science—Its Own Arbitrator ?
By A. S. Aldis, F.R.C.S. | 16 pp. 2s. 0d. |
| Responsibility for the Society we Serve
By A. S. Aldis, F.R.C.S. | 16 pp. 2s. 0d. |
| The Sanctity of Life
By D. MacG. Jackson, M.D., F.R.C.S. | 28 pp. 2s. 0d. |
| Human Life and Human Worth
By D. MacG. Jackson, M.D., F.R.C.S. | 16 pp. 2s. 6d. |
| The Rational Basis of Religious Experience
By A. G. Oetlé, M.D. | 24 pp. 2s. 6d. |
| Will Hospital Replace the Church ?
By D. M. Lloyd-Jones, M.D., M.R.C.P. | 24 pp. 2s. 6d. |
| Man in his Environment
By F. J. Wright, M.D., F.R.C.P., F.R.C.P.E. | 20 pp. 2s. 6d. |
| Some Thoughts on Faith Healing
Edited by V. Edmunds, M.D., F.R.C.P., and
C. G. Scorer, M.D., F.R.C.S. | 72 pp. 4s. 6d. |
| Medical Ethics: A Christian View
A Symposium edited by V. Edmunds, M.D., F.R.C.P., and
C. G. Scorer, M.B.E., M.D., F.R.C.S. | 160 pp. 17s. 6d. |
| <i>(Published by E. and S. Livingstone, Edinburgh)</i> | |
| Ethical Responsibility in Medicine
Edited by V. Edmunds, M.D., F.R.C.P. and
C. G. Scorer, M.B.E., M.D., F.R.C.S. | 200 pp. 30s. 0d. |

These publications, and full catalogue on request, are obtainable from
the Christian Medical Fellowship, 56 Kingsway, London, W.C.2